DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONS

Public Safety Services

M. J. "MIKE" FOSTER, JR.
GOVERNOR

V. J. BELLA
STATE FIRE MARSHAL

**MEMORANDUM**

TO: Architects, Engineers, Sprinkler Contractors, Plan Review, Inspections

FROM: Jerry W. Jones
Deputy Assistant Secretary/Chief Architect

RE: Sprinkler Submittal Review Checklist

DATE: October 1, 1998

In order for this office to more effectively review and process sprinkler submittals, we have prepared the attached, subject checklist. This checklist is self explanatory, and we encourage all applicants to use it. As noted in the checklist, your help, up front, will facilitate a complete submittal package, shorten our review time, and help us to get your project reviewed and returned sooner. Thank you for your help, in completing and coordinating the items in this checklist. Please direct any questions pertaining to this checklist, to Jean Carter.

JWJ/JCC/jcc

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STATE OF LOUISIANA
DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONS
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# SPRINKLER SUBMITTAL REVIEW CHECKLIST

As an aid to streamline our sprinkler review process, we ask that you complete this checklist, and attach it to your Sprinkler System Plan Review Application. Please address each checklist item in your package, whether the item is conveyed on the shop drawings, cut sheets, general notes, calculations, or cover letter, etc. Any items not addressed may cause unnecessary delays or project "hold" on your review. Your help, up front, will facilitate a complete submittal package, shorten our review time, and help us to get your project reviewed and returned sooner. Please verify that each numbered item below, is: A. in your submittal, B. correct, and C. is coordinated within the submittal (shop drawings match hydraulic calculations match material cut sheets). Then provide a check mark adjacent to each numbered item, or print "N/A" for items not applicable to this submittal. Thank you for your help, in completing and coordinating the items in this checklist.

Project Name (please print): _____

Project Address: _____

Checklist Completed By: _____ Date: _____

## Plan Review Application

___ 1. Denote applicable State Fire Marshal Architectural (New Construction or Renovation) Review number, associated with this scope of work. If the architectural review exists as a "preliminary, hold, or not-in compliance" type, the sprinkler package will be found not in compliance, and returned un-reviewed. If project is exempt from an architectural review, provide exemption notice. If project design is based on an existing State Fire Marshal appeal letter, furnish copy. Applicants requesting reviews under alternate code editions shall provide written request, stating reasons and life safety equivalencies.

___ 2. Project name, address, occupancy, and owner denoted on application, and matches that of architectural review.

___ 3. Professional of record name, address, license number, and signature on application.

___ 4. Copy of inspection report (State Fire Marshal, sprinkler contractor, fire department, etc.).

___ 5. Preparer of shop drawings information complete on application. All information shall match the State Fire Marshal Sprinkler Licensing Section Listing.

## Shop Drawings

___ 6. Drawings to be legible copies (bluelines, photo copies), not originals, and all drawn to scale.

___ 7. Professional Of Record shop drawing review and review stamp on each shop drawing sheet, and on cover of calculations and cut sheets.

___ 8. Occupancy class of each area or room identified.

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(continued on back)

___ 9. All sprinklers identified by make, type, orifice size, temperature rating, thermal sensitivity, including all existing heads affecting the submittal scope of work. Sprinkler legend shall match sprinkler plans (graphic symbols to be consistent) and cut sheets.

___10. For large storage areas, provide storage height, method of storage, description of commodities, etc. If project is specialized storage design (NFPA 231, 231C, etc.), provide complete design statement denoting methodology for arriving at project area/densities.

___ 11. All piping identified by size, type, inside diameter, and schedule, including all existing piping affecting the submittal scope of work.

___ 12. All ceiling information: heights, types, architectural profiles (vaults, coffers, furrs, etc.), construction assembly (combustible ceiling or suspended framing?, significant combustibles in ceiling cavity?, etc.).

___ 13. Sprinkler obstructions denoted (suspended light fixtures, duct work, architectural items, etc.).

___ 14. H.V.A.C. openings shown.

___ 15. Method of maintaining sprinkler system at or above 40 degrees F identified ("owner to provide heat" is unacceptable). Describe all unheated, applicable areas, and explain methodology of all types, sizes, locations, etc., of freeze protection devices.

___ 16. Graphically highlight each hydraulic area (perimeter dashed line, etc.), title each area on the plans, with matching title on each calculation set.

___ 17. Location and rating of fire walls, unprotected openings, and other assemblies affecting sprinkler design.

___ 18. Size of city main at street, denoting dead end or circulating (or denote private supply).

___ 19. Total area protected by each system on each floor.

___ 20. Location, type, and listing of hangers ("hanger spacing complies with NFPA 13" is unacceptable).

___ 21. Underground pipe size, length, location, type, point of connection to city main, bury depth, thrust blocks, and all appurtenances (valve types, water meters, valve pits, backflow preventers, etc.), with appropriate back-up cut sheets (include manufacturer's friction/pressure loss for each device).

___ 22. All hydraulic name plate information.

___ 23. Hydraulic reference points shall coordinate between the drawings and calculations.

___ 24. Setting for pressure reducing valve denoted.

Hydraulic Calculations

___ 25. Verify the water supply, test location, date (must be 12 months current) peak demand time (or calculated adjustment), and account for test elevation at calculations.

___ 26. Verify the hazard classification (light, ordinary, special occupancy, etc.).

___ 27. Verify the design criteria (density/sq. ft. over the hydraulic design area).

___ 28. Verify the location of the area calculated (most hydraulically demanding not always the most physically remote).

___ 29. Verify the dimensions of the area calculated (design area shall not extent beyond designated area served by each sprinkler). Sufficient length parallel to the branch lines or cross mains, as required.

___ 30. Verify the densities (sprinklers flowing at or above minimum required flow rate).

___ 31. Verify the pipe sizes, lengths, equivalent lengths of fittings, and flow paths (account for all pressure losses).

___ 32. Verify the hose demand.

___ 33. Confirm that the system demand is at or less than the available water supply (include demand vs. supply graph).

Material Cut Sheets

___ 34. Sprinklers, pipes, valves, pressure reducing valves, flow switches, backflow preventers, water meters (all system devices affecting hydraulic design, whether existing or proposed).

___ 35. Fire pump type, size, and design curves (provide current pump test for existing pump).